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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,436	03/12/2001	Makoto Inoue	450108-02595	2310

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EXAMINER

RADA, ALEX P

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 08/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

but

Office Action Summary

Application No.

09/743,436

Applicant(s)

INOUE ET AL.

Examiner

Alex P. Rada

Art Unit

3713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

In response the Election/Restriction filed June 19, 2002, in which the applicant's have elected without traverse Group I, Claims 1-13 which is directed to a robot and a method of controlling the robot and claims 1-13 are pending in this application.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Robot device and control method.

2. The abstract of the disclosure is objected to because the abstract must be a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative. Correction is required.

See MPEP § 608.01(b).

Claim Objections

3. Claims 2, 3, 6, 7, 10, 11, 12, and 13 are objected to because of the following informalities: The phrase, "characterized by" in the preamble does not further limit the independent claim. The examiner suggests using the word, "wherein". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, the phrase, "an external sensor for detecting the external condition and/or inputs from the outside" is vague and indefinite because the external condition "and/or" inputs cannot be determined. Is the external sensor for detecting the external condition "and" the inputs from the outside or the external sensor for detecting the external condition or the inputs from the outside? Also, the same applies line 6 of claim 9.

Claim 1 recites the limitation "the emotion" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the strength" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the emotion model" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the pre-held emotion" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the light emitting unit" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the light" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the first step" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the second step" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the strength" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the flashing pattern" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the emotion model" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3713

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamiya '772 in view of Ho '223.

8. Kamiya discloses a robot having a light emitting means for functioning as eyes (figure 8), an external sensor (figure 3), and a control means for the light emitting means in order to express the emotion based on the output of the external sensor as recited in claims 1 and 9. The robot further having a moving unit, a driving means, and characterized by expressing the emotion by controlling the driving means to drive the moving unit with a predetermined pattern as recited in claims 5 and 12. The control means updates the emotion based on the output of the external sensor and determines the emotion based on the emotion model updated as recited in claims 6 and 13. The robot further comprises a head and the head covered with a semi-transparent cover (figure 1) as recited in claim 8. Kamiya does not expressly disclose the light emitting means is formed of light emitting diode as recited in claim 2. The control means further expressing the emotion by patterns of the light emitting means as recited in claims 3 and 10. The light emitting means having different colors, which express different emotions by the color of the light emitting means as recited in claims 4 and 11. The light-emitting unit having a plurality of shapes according to the emotion to be expressed as recited in claim 7. Ho teaches disclose the light emitting means is formed of light emitting diode, the control means further expressing the emotion by patterns of the light emitting means, the light emitting means having different colors, which express different emotions by the color of the light emitting means, and the light-emitting unit having a plurality of shapes according to the emotion to be expressed. By having light

Art Unit: 3713

emitting diodes having different colors, one of ordinary skill in the art would be able to provide a plaything or a toy so that the plaything or toy could emit colorful light and have an expressive face. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention was made to modify Kamiya to include the light emitting means is formed of light emitting diode, the control means further expressing the emotion by patterns of the light emitting means, the light emitting means having different colors, which express different emotions by the color of the light emitting means, and the light-emitting unit having a plurality of shapes according to the emotion to be expressed as taught by Ho. To do so would be able to have a user to associate different colors with different visual expressions. Furthermore, it would have been obvious to have flashing light emitting diodes (LED's) to further exaggerate the different expressions by the different colors.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hampton '490 discloses an interactive toy that provides highly life-like and intelligent seeming interaction with the user thereof.

Naruki '152 discloses an image display device having a plurality of image data indicative of the action of an animal character.

Dankman '927 discloses a toy, which responds to a complex sound such as human speech, which generates a train of audio pulses.

Art Unit: 3713

Bailey '209 discloses a doll simulating infant behavior include sensor that detect care given to the doll such as, feeding, rocking, and neglect or abuse.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 703-308-7135. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 703-308-4119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Alex P. Rada
Examiner
Art Unit 3713

apr
July 29, 2002



MICHAEL O'NEILL
PRIMARY EXAMINER